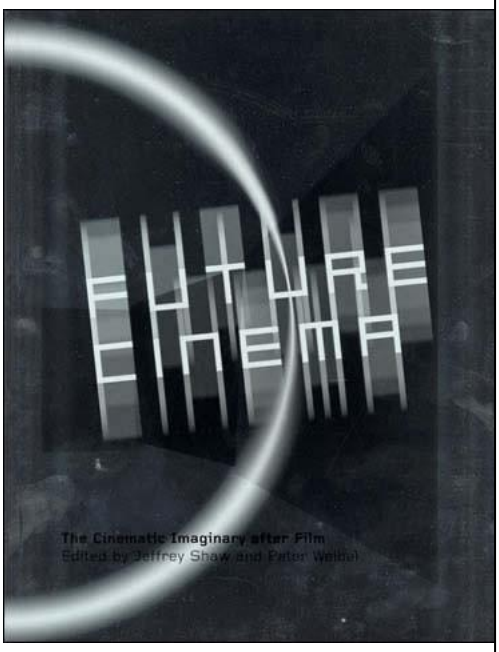
Future Cinema

An investigation of new cinematic forms,
incorporating electronic media,
transforming traditional relationships
between film and reality
and between producer and audience.



In our presentation, we will be exploring how traditional cinema has been developed since its inception

We will start with how video was heavily experimented with in many diff ways,

Then we will see how immersive experiences came about with the arrival of virtual reality, games, and interactive films

The narrative experience is also explored thru alternative means, via objects and in hybrid forms, crossing over to other established forms like poetry.

11 Screenings - Peter Weibel/Expanded Cinema, Video and Virtual Environments

Experiments

- Material
- Multiple Screen
- Narrative
- Time and Space
- Sound

Combinations

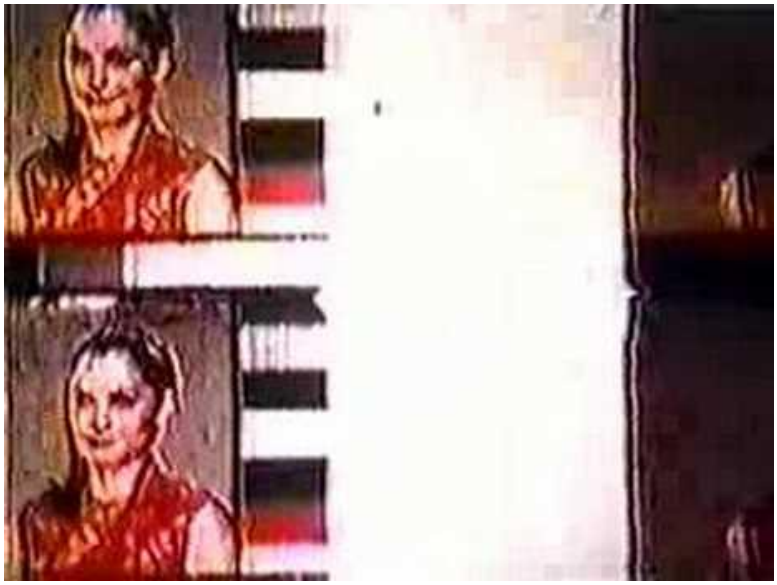
- Multiple monitors and screens, Multiple projections and perspectives, Multi-perspective narrations and plots
- Found image and sound, Found film experiments
- Computer film
- Navigable Rhizomatic Narration

Post WWII , the experimental films of 1960s became a new branch of art, known as Avant garde film

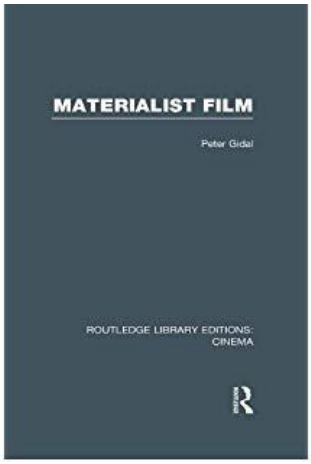
First the cinematic code was extended thru analog means ,
shortly after new devices like the video recorder were introduced,

By 1990s, video art became dominant,
And soon after film entered the field of digitally expanded cinema.(cinema extended thru digital means)

Material Experiments



Film in which there appear edge lettering sprocket holes dirt particles etc, Owen Land, 1965/66



Materialist Film, Peter Gidal, 2013

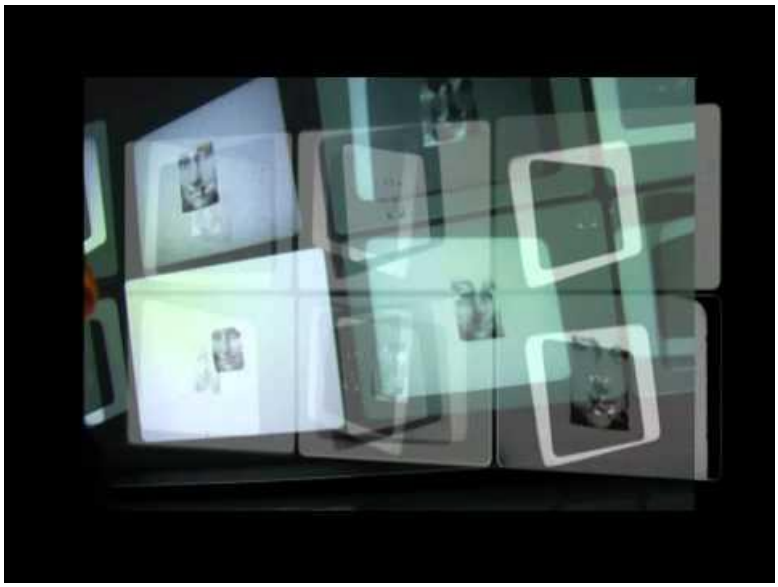
Artists experimented by physical manipulation with the material of film itself

This is a six-minute loop of a double-printed image of a blinking woman by Owen Land
her image is off-centre, making visible the sprocket holes and edge lettering on the film.

His intention was to focus attention on the components that viewers are not supposed to,

To read more about the history of these material experiments , check out Materialist Film by Peter Gidal

Multiple Screen Experiments



After Leonardo, Malcolm Le Grice, 1974/2015

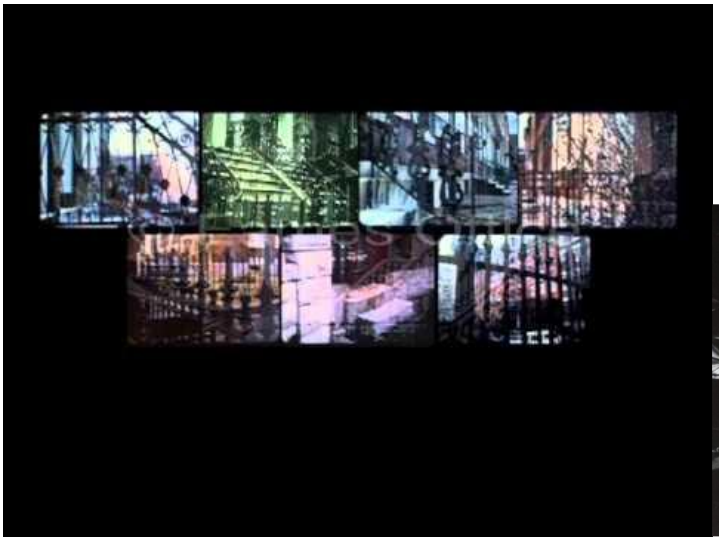
Radical experiments were done on the screen itself, exploded, multiplied, thru split-screen,
Or screens placed on several walls, similar to how painters sliced up the canvas.

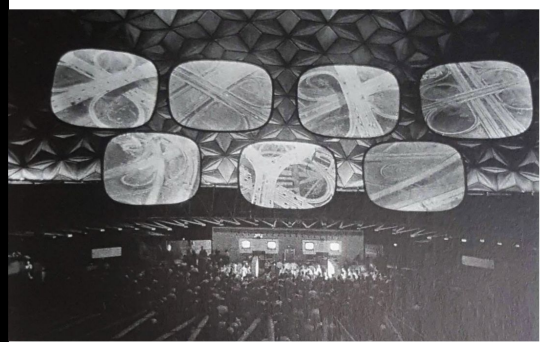
After Leonardo is a constantly evolving film installation.
It was first screened in Liverpool, 1973 as a six-projector 16mm film performance.

It has since been a developing installation and performance work, including video, sound improvisations, live recordings and additional projections.

The work questions artistic authenticity and instability of meaning across history.

Narrative Experiments





Glimpses of the USA, Charles and Ray Eames, 1959

Multiple projections of different films alongside one another represent an expression of multiple narrative perspectives.

This method of presentation mimics the diffuse and fragmentary way in which we experience the world.

With more than 2,200 still and moving images,
Glimpses of the U.S.A. is designed to provide a visual expression of the complexity and diversity of American life.

These images were combined into seven separate 35mm film reels,
projected onto 20-by-30-foot screens installed in a 250-foot-diameter geodesic dome.

Time and Space Experiments

Wavelength, Michael Snow, 1967

Artists started to experiment with shifting and distortion of space and time using techniques like slowing, extending and delaying time.

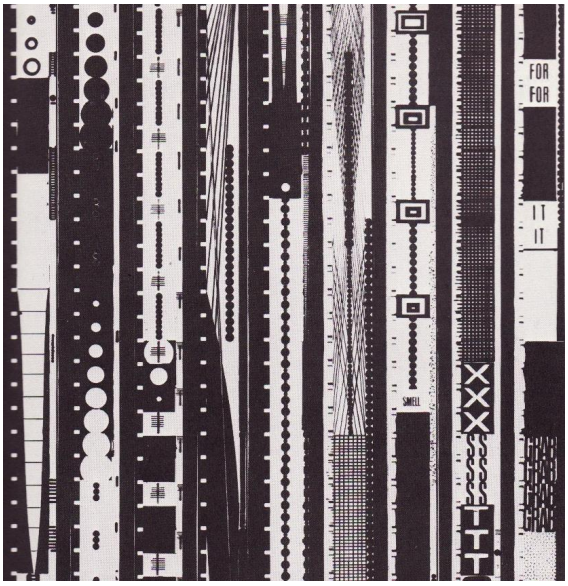
Wavelength is a 45 minute film by Michael Snow.

The zoom moves in stops and starts, at different times of day and night

and includes superimpositions, reversals, and several different film stocks, providing a range of colors and textures.

Fragments of narrative action occur during the zoom.

Sound Experiments



Soundtrack, Barry Spinello, 1970

From 1967-72, Barry Spinello made films without camera or tape recorder by handpainting sound and picture onto 16mm film.

The idea was to integrate both sound and picture in a single creative process, using the same tool.

Multiple monitors and screens,

Multiple projections and perspectives,

Multi-perspective narrations and plots

Turbulent, Shirin Neshat, 1998

In Turbulent, Neshats presents the binary opposition of man and woman in a patriarchal society on two opposing screens.

The woman has a voice but neither words nor listeners, only sound and ability to scream.
The man possesses the words, culture of language and an audience that applauds his performance.

This piece highlights the exclusion of woman from the building of civilisation and society.

Found image and sound, Found film experiments

Pièce Touchée, Martin Arnold, 1989

Passsage À L'Acte, Martin Arnold, 1993

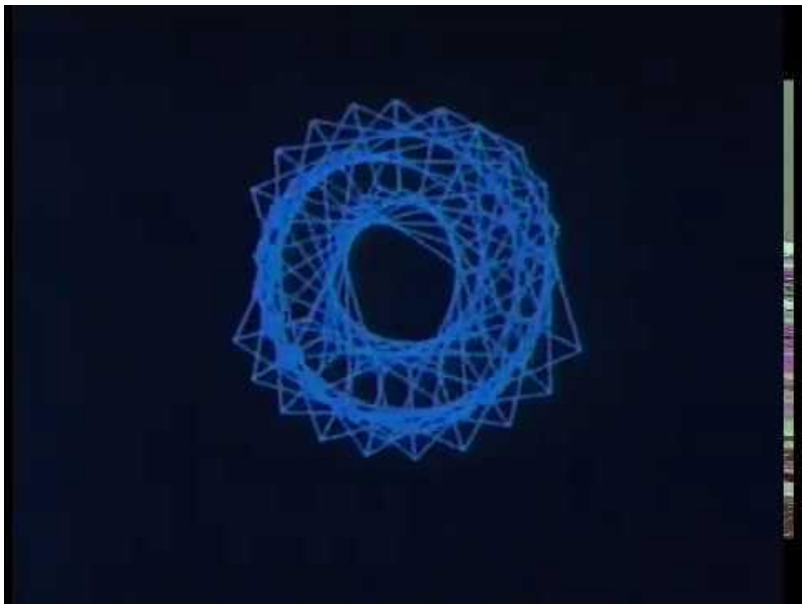
Arnold is an Austrian experimental filmmaker known for his obsessive reworkings of found footage.

He deconstructs found footage to make hidden semantic structures visible through gradual repetition.

'Piece Touchee' is based on a single 18-second shot from a 1954 film called 'The Human Jungle' .

By editing and stretching out the 18-second sequence into a 16 minute piece, he is attempting to create, or possibly unearth, narratives concealed within the mundane film from which he sampled.

Computer film



Permutations, John Whitney, 1968

Permutations, the first computer generated film, was written in GRAF and FORTRAN, and recorded in black and white from the monitor of an IBM 360 mainframe.

Color was added afterwards using an optical printer.

The 281 points are moving about the screen according to a set of instructions

The film was a demonstration of the computer as an animation tool, animating 281 points, all moving in precise orbits at independent rates and directions.

The overall effect is to subtly generate and resolve tension - similar to the primary emotional power of music composition.

Navigable Rhizomatic Narration

Blackboard, Frank Fietzek, 1993/94

The narrative universe becomes reversible in the digitally expanded cinema.

Typical chronology is changed through repetitions, suspension of linear time, temporal and spatial manipulations .

In blackboard, a small, moveable monitor is mounted on tracks in front of an old school blackboard, on which chalk smudges can still be seen.

The monitor is connected to a computer visible below the blackboard.

As the monitor is moved along the board, concepts and phrases written in chalk flash on and off the screen.

Words include themes like recollection, memory, perception.

The piece is about loss of memory and its transfer into machine storage, as well as the work involved in remembering.

A physical effort is required to move the monitor, thus making the stored information visible, but it is impossible to bring out a particular fragment of memory on purpose.

02 Calculated - Sabine Himmelsbach/The Interactive Potential of Distributed Networks

Progression

- Immersion: From Panorama to Virtual Reality
- From Video Consoles to Massive Multiplayer Online Worlds
- Non-linear Narrative Structures in Computer Games
- Participation in Interactive Films

"The end of the illusion begins with the participation of the observer."

Ursula Frohne

Interactive films and computer games allow the observer to participate directly in the action.

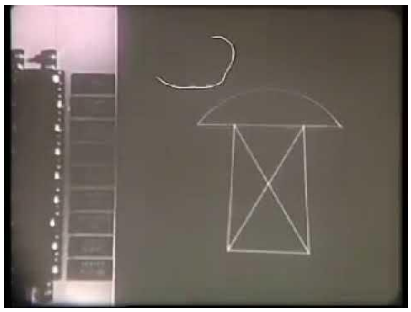
Panoramas strive to put the observer in the picture and stimulate his participation.

Games allow the creation of virtual worlds, where the player can enter via an avatar.

Online games allow players to develop communal interactive spaces and participate fully with one another.

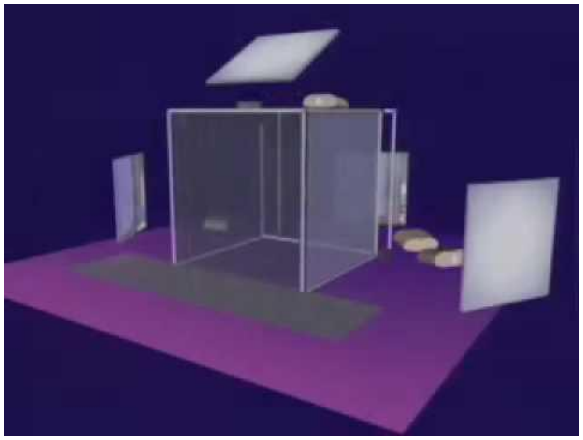
These networked communities in virtual global space create authentic group experiences in real time.

Immersion: From Panorama to Virtual Reality



Sketchpad,
Ivan Sutherland, 1963

Head Mounted Display,
Ivan Sutherland, 1968



Computer Aided Virtual Environment(CAVE), EVL, 1991

The panorama was the most influential precursor to virtual reality, inviting visitors to experience foreign lands simply by observation.

Ivan Sutherland developed the first computer graphics system called Sketchpad, allowing users to directly manipulate images on the screen and see the results.

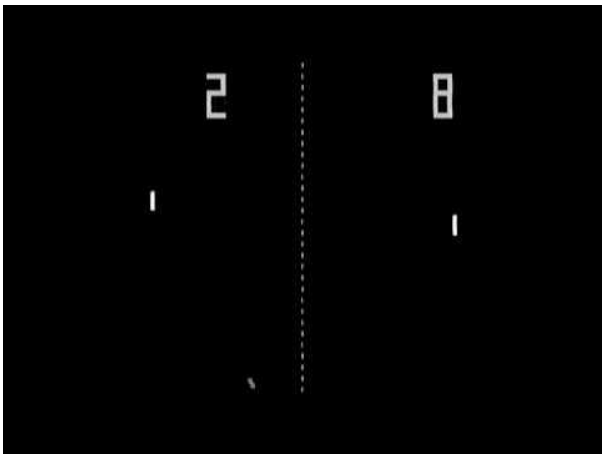
He also developed the Head Mounted Display, an interface that facilitated interaction between observer and computer.

The computer image's realtime reactions to the user's own movements produce the illusion of him being 'in the picture'.

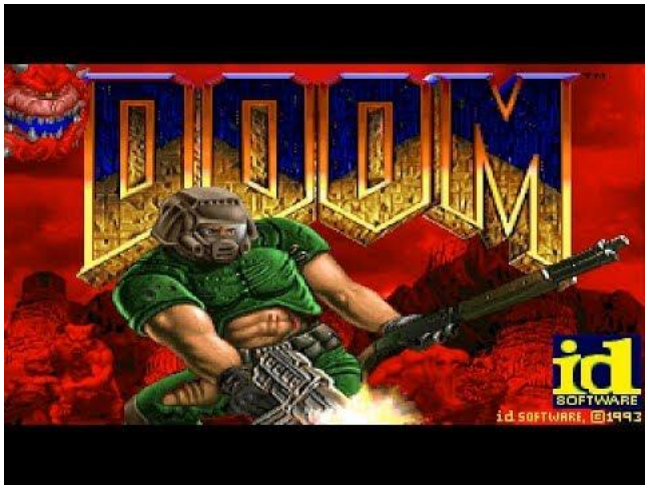
In 1991, a new immersive projection technology called CAVE was developed in Japan and USA.

The user is located within, exploring it with the help of stereo glasses and a hand-held interface.

From Video Consoles to Massive Multiplayer Online Worlds



Pong, Atari, 1972



DOOM, ID-Software, 1994

Atari created one of the first games , Pong in 1972

During the 1990s internet boom , text-based games called MUDs(Multiple user dungeons) allowed the creation of networked games .

Texts were used to describe virtual worlds, where users interacted with each other using text commands.

As internet speeds increase and technology advances, the sophistication of networked games followed pace.

The first networked game was DOOM, where up to eight players can compete simultaneously against each other.

These further inspired other classics like Diablo, Quake and many others.

Non-linear Narrative Structures in Computer Games

Half-life, Valve, 1998

Everquest, Sony Online Entertainment, 1999

Games soon saw increasingly emphasized narrative components.

Half-life was one of the pioneers of a first person shooter that immersed the player in an interactive narrative plot structure.

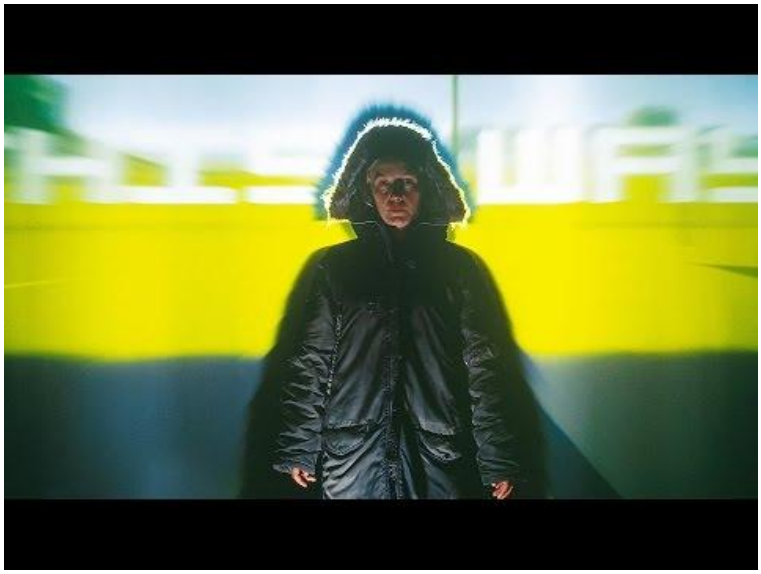
Other great examples include Sim City, The Sims and Everquest.

In the online world of Everquest, the virtual world runs continually as players enter and leave.

These worlds are dynamic, unpredictable and fascinating.

The players' engagement create a feedback loop that continuously generates new content and situations.

Participation in Interactive Films



Desert Rain, Blast Theory Group, 1999

In interactive films, the observer determines the actual plot of a story via tracking systems and sensors.

Desert rain by Blast Theory Group combines the potential of an interactive installation with the immersiveness of a computer game.

Six participants stand in separate cubicles with pressure sensitive floors that control their movements in the virtual world.

They have to communicate and cooperate with each other to find their goal and complete their mission, making this a really immersive collective experience.

Interactive Cinema Group, MIT Media Lab

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- Researches how digital technology can impact how films are made and presented
- Often works with metadata, networks, physical installations, etc

Research and Future Cinema

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- Often works with meta data, networks, physical installations, etc.

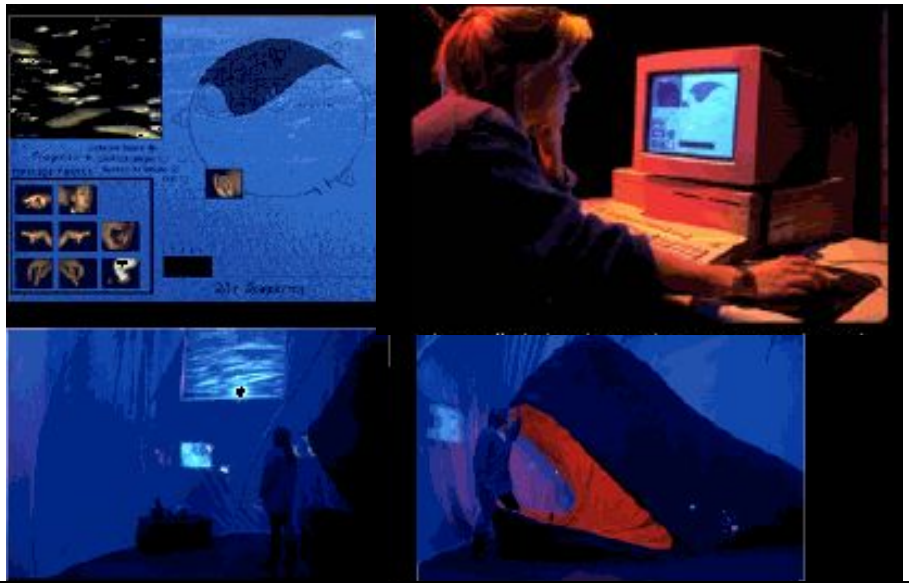
Improvisational Media Fabric Take 1

- Making cinema is intelligent guessing
- Meta Cinema
- How can we take the creativity required to make a film, and apply it to how we watch a film?

Improvisational Media Fabric Take 1

- Making cinema is intelligent guessing
    - A camera doesn’t tell you how to make a film, you as the artist must discover your own way of telling the story
- Meta Cinema
    - Challenging the idea that cinema is just a single screen that the audience passively views
- How can we take the creativity required to make a film, and apply it to how we watch a film?

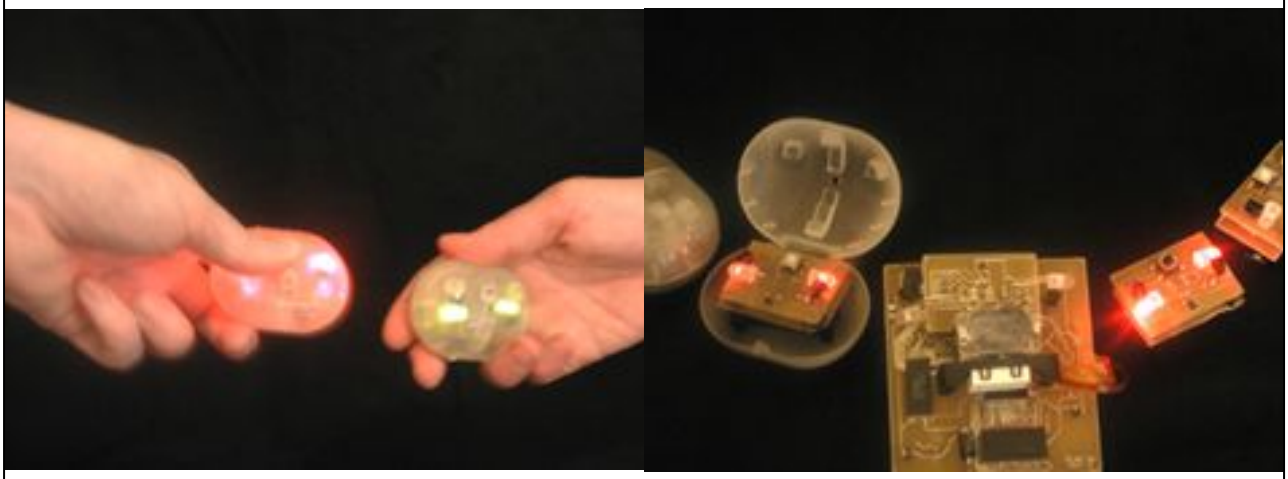
Wheel of Life: A Transformational Environment



- *Wheel of Life: A Transformational Environment*
    - How can audience members interact and share experiences in real time?
    - How it works:
        - § One audience member is given the role or explorer. They are brought to a physical environment they must explore.
        - § Another member is given the role of the guide. The guide is put in a remote workstation, and must use lighting cues, pre recorded messages and other signals, to help the explorer navigate the environment and tackle obstacles and puzzles.

- Spin off called *Dogmatic*
    - Same concept, but in a digital space

Storybeads



- *Storybeads*
    - Participants would wear necklaces made of media beads that contained different images.
    - The beads also wireless transmitters that allowed the wearers to swap images with other participants

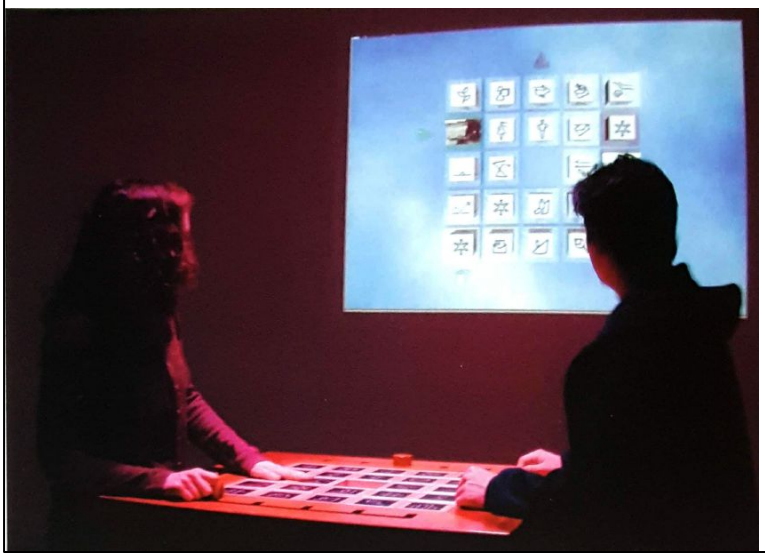
Tangible Viewpoints

- *Tangible Viewpoints*
    - Game pieces are placed on a table made from a projection surface. Moving the pieces will change and affect the projections shown on the table. Players can build a story by moving the game pieces

Happenstance

- *Happenstance*
    - A screen that shows buts of information and story pieces gathered into clouds. When the conditions are correct, then the clouds will “rain down” the information gathered, thus exposing the audience to multiple stories at once.

Flights of Fantasy



- There are two rooms. In one room, are tables with wooden blocks, each block has their own symbol. Moving the blocks around creates a short film comprised of short sound and video clips.
- In the other room, is a series of birdcages, each containing a small screen. If a audience member opens a cage, the screen will start playing a film made by an audience member from the first room.

N. Katherine Hayles/ Timely Art: Hybridity in New Cinema and Electronic Poetry

- The intersection of film and electronic poetry
- Electronic poetry
  - Combining words, images, sound, color, etc. in programmable media

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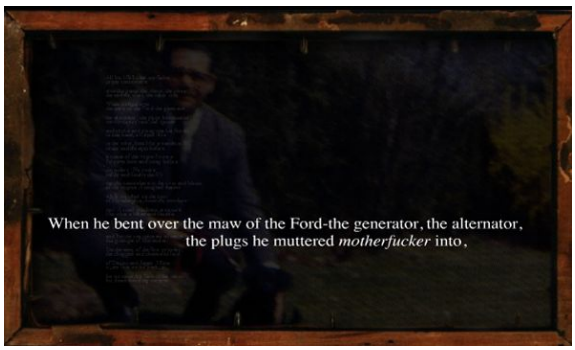
Sinking

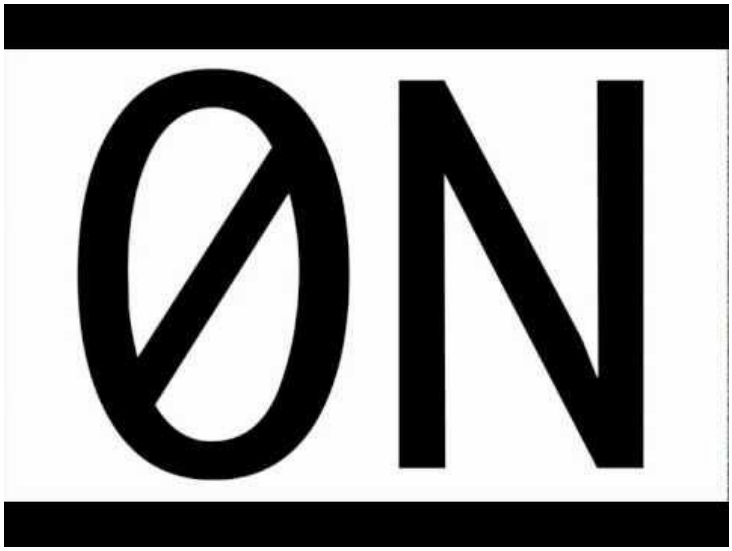
- *Sinking*
    - ingrid ankerson
    - A poem, programmed in Flash, that takes place at a kitchen sink
    - Combines the words with looped background images and ambient sound
    - Uses sound to suggest a more ominous interpretation to the words

His Father in the Exhaust of Engines



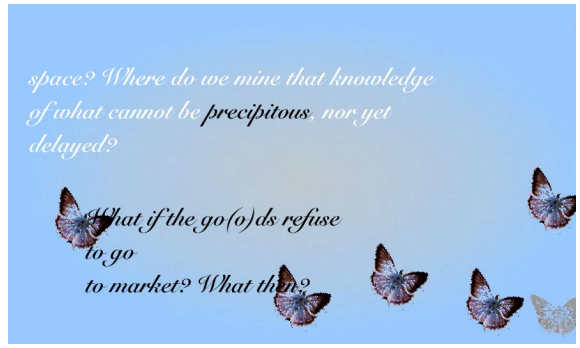
- *His Father in the Exhaust of Engines by Bruce Smith*
    - Uses a combination of short animations, fuzzy images, overlapping images and other visual cues to add meaning and subtext to the words on screen.

Dakota



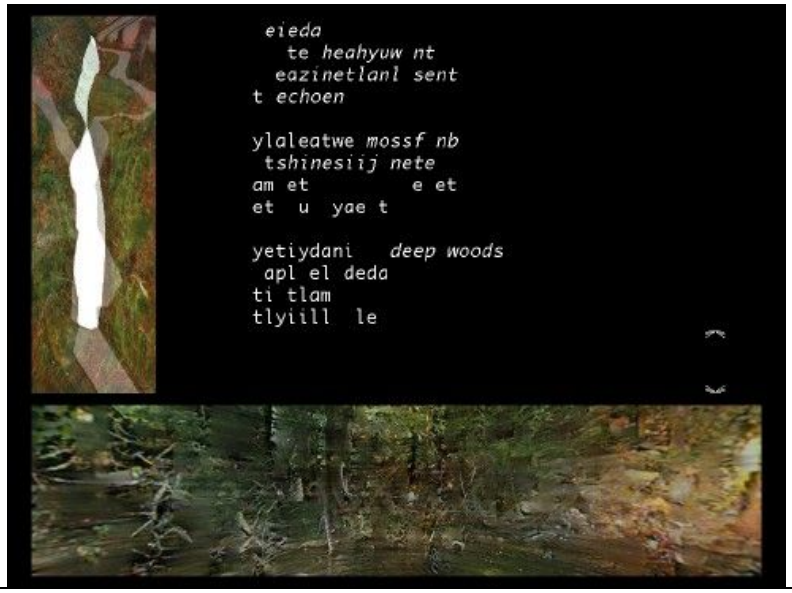
Heavy Industries and Young Hae Chang

Errand upon which we came



- *Errand upon which we came by Stephanie Strickland*
    - Uses abstract color like green, brown and blue, mixed with bird calls and other ambient, to suggest images from nature

riverIsland



- *riverIsland by John Cayley*
    - Consists of two loops of poems, one horizontal and one vertical.
    - Users can navigate these poems by physical clicking of grabbing them with the mouse, or using the navigational screen
    - Turns words into psychical, interactive images

In Conclusion

- Peter Weibel/Expanded Cinema, Video and Virtual Environments
  - Experimental film, multi-screen
- Sabine Himmelsbach/The Interactive Potential of Distributed Networks
  - VR, Computer Games
- Interactive Cinema Group, MIT Media Lab
  - Physical Installations, Media devices
- N. Katherine Hayles/ Timely Art: Hybridity in New Cinema and Electronic Poetry
  - Sound, Imagery, Literature

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